

## DETAILED ACTION

### *Summary*

Receipt of IDS filed on 7/26/07 and 12/28/08 is acknowledged. Claims 1-16 are pending. Claims 1-16 are rejected.

## NEW REJECTIONS

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 6-9, 12, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by EP 0045493 ('493).

The instant claims are directed to a skin composition comprising alginate, at least one weak acid selected from phosphoric acid and ethylenediaminetetraacetic acid and water and a gelling agent containing calcium salts.

The limitations of claims 1-2 are taught by '493:

- '493 teaches a composition for use as a face mask comprised of water soluble alginate material, water soluble bivalent metal salt reactor, a phosphate retarder, water, etc (abstract, claim 1 and 3, Examples; instant claim 1).

- Claim 3 of '493 teaches that the alginates include sodium alginate and potassium alginate, the bivalent metal salts include calcium or magnesium salts and retarders are various sodium and potassium phosphates. '493 teaches that the sodium alginate is preferred (pg. 6, lines 6-7, Examples; instant claim 2). '493 teaches that a bivalent metal ion added to a sol of alginic acid results in an insoluble, irreversible alginate gel (pg. 3, lines 25-29).
- '493 teaches that the retarder is inorganic and has a cation different than the soluble, bivalent metal ion salt and that most are alkali metal phosphates (pg. 7, lines 6-9). Any phosphates having monovalent alkali metal cations are acceptable retarders (pg. 7, lines 14-15).

The limitation of claim 6 is taught by '493:

- '493 teaches extenders such as silica, bentonite, alumina oxide, etc, which are taught by the instant specification to be 'adhesives' of instant claim 6 ('493 pg. 9, lines 1-3; instant spec pg. 13, lines 2-4).

The limitation of claim 7-9, 10-12, and 16 is taught by '493:

- '493 teaches that the composition and process for making a smooth elastic gel suitable for use as a removable face mask (claims 7-10). '493 further teaches that the purpose of the mask is to treat skin infections through transfer active ingredients to the skin and removal other impurities (pg. 2, lines 5-11; instant claims 7-8).
- '493 teaches that the composition has a tightening effect on the skin and imparts a rejuvenated skin feeling (pg. 2, lines 12-15; instant claims 10-11).

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- It is the Examiners opinion that the product of '493 is antipruritic having the same composition for external use of instant claims 1, 2, 6 meets the limitation of claims 9, 12, and 16.

Claims 1-2, 4, 6-9, 12, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 06-179614 ('614).

The instant claims are directed to a skin composition comprising alginate, at least one weak acid selected from phosphoric acid and ethylenediaminetetraacetic acid and water and a gelling agent containing calcium salts.

The limitations of claims 1-2 and 4 are taught by '614:

- '614 teaches a cosmetic pack comprising a gel part with alginic acid salt and a powdery part containing a bivalent metal salt and a retarding agent, which are mixed immediately before use (abstract). '614 teaches sodium alginate and a metal salt such as calcium sulfate, calcium chloride and a retardant such a sodium salt of phosphoric acid [0005, 0008, 0010-0011].

The limitation of claim 6 is taught by '493:

- '614 teaches bulking agents such as bentonite, silica, magnesium carbonate, crystalline cellulose, etc, which are taught by the instant specification to be 'adhesives' of instant claim 6 ('614 [0012-0013]; instant spec pg. 13, lines 2-4).

The limitation of claim 7-9, 10-12, and 16 is taught by '493:

- '614 teaches that when applied to the face it solidifies in 5-10 minutes and that it has a cool feeling under application with gauze [0014-0016, 0027]. '614 also

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teaches that the gel has good using feeling when film formation occurs after application to the skin [0027].

- It is the Examiners opinion that the product of '614 is antipruritic having the same composition for external use of instant claims 1, 2, 6 meets the limitation of claims 9, 12, and 16.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 6-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0045493 ('493) in view of US 2003/0148931 ('931) or US 4,935,229 ('229) or US 5,219,562 ('562).

The limitations of claims 1-2, 6-9, 12, and 16 are taught:

- '493 is taught above and teaches a composition for use as a face mask comprised of water soluble alginate material, water soluble bivalent metal salt reactor, a phosphate retarder, water, etc (abstract, claim 1 and 3, Examples; instant claim 1).

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- '493 does teach that a 'retarder' is any monovalent alkali metal phosphate and many are also well known pH adjusters such as sodium citrate (pg. 7, lines 6-15).
- '493 does not teach specifically sodium dihydrogen phosphate (or monosodium phosphate) as a monovalent alkali metal phosphate.

The limitations of claims 3 and 13 are taught:

- '931 teach pharmaceutical composition comprising a polysaccharide derivative, sugars and a pH adjusting substance (see Abstract). According to '931, there are a number of suitable pH adjusting substances including sodium citrate and sodium dihydrogenphosphate (see paragraph 0041). Numerous other patents, such as US 4,935,229 and US 5,219,562 also recognize sodium dihydrogenphosphate as an effective pH adjusting substance.
- As such, those of ordinary skill would have been motivated to add sodium dihydrogenphosphate as taught by either '931, '229, or '562 for its art recognized pH adjusting capabilities to the composition of '493 with the expectation of obtaining a beneficial topical formulation. It is noted that '931, '229, '562 may have different intended uses, the use of sodium dihydrogenphosphate in similar cosmetic compositions is clearly set out for its well known properties.  
Optimization of desired results through variation in the amount or percentage of sodium alginate is within the skill of the ordinary practitioner barring a showing of unexpected results. As such, it would have been obvious to one of ordinary skill in the art at the time of invention to add sodium dihydrogenphosphate for its well

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known pH adjusting properties, and within the claimed percentage range, to the composition of '493 in view of the suggestions to do so by '931, '229 or '562.

Claims 1-3, 6-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 06-179614 ('614) in view of US 2003/0148931 ('931) or US 4,935,229 ('229) or US 5,219,562 ('562).

The limitations of claims 1-2, 6-9, 12, and 16 are taught:

- '614 is taught above and teaches a composition comprising sodium alginate and a metal salt such as calcium chloride and a retardant such a sodium salt of phosphoric acid or citrate [0005, 0008, 0010-0011].
- '614 does not teach specifically sodium dihydrogen phosphate (or monosodium phosphate) as a monovalent alkali metal phosphate.

The limitations of claims 3 and 13 are taught:

- '931 teach pharmaceutical composition comprising a polysaccharide derivative, sugars and a pH adjusting substance (see Abstract). According to '931, there are a number of suitable pH adjusting substances including sodium citrate and sodium dihydrogenphosphate (see paragraph 0041). Numerous other patents, such as US 4,935,229 and US 5,219,562 also recognize sodium dihydrogenphosphate as an effective pH adjusting substance.
- As such, those of ordinary skill would have been motivated to add sodium dihydrogenphosphate as taught by either '931, '229, or '562 for its art recognized pH adjusting capabilities to the composition of '614 with the expectation of

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obtaining a beneficial topical formulation. It is noted that '931, '229, '562 may have different intended uses, the use of sodium dihydrogenphosphate in similar cosmetic compositions is clearly set out for its well known properties.

Optimization of desired results through variation in the amount or percentage of sodium alginate is within the skill of the ordinary practitioner barring a showing of unexpected results. As such, it would have been obvious to one of ordinary skill in the art at the time of invention to add sodium dihydrogenphosphate for its well known pH adjusting properties, and within the claimed percentage range, to the composition of '614 in view of the suggestions to do so by '931, '229 or '562.

Claims 1-2, 4-12 and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 0045493 ('493) in view of US 6,168,798 ('798).

The limitations of claims 1-2, 6-9, 12, and 16 are taught:

- '493 is taught above and teaches a composition for use as a face mask comprised of water soluble alginate material, water soluble bivalent metal salt reactor, a phosphate retarder, water, etc (abstract, claim 1 and 3, Examples; instant claim 1). Claim 3 of '493 teaches that the alginates include sodium alginate and potassium alginate, the bivalent metal salts include calcium or magnesium salts and retarders are various sodium and potassium phosphates.
- '493 does not specifically teach calcium glycerophosphate or lactic acid, but does teach that the mask must be dermatologically innocuous and non-toxic (pg. 4, lines 3-5).

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The limitations of claims 4-5 and 14-15 are taught:

- '798 teaches a composition for treating blemishes and skin disorders which is mild and non-irritating includes calcium glycerophosphate (abstract). '798 also teaches preferably including lactic acid together with calcium glycerophosphate, which significantly reduces irritation of the compositions and reduces sebum (col. 5, lines 5, and lines 25-35).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of '493 and '798. One of ordinary skill in the art would be motivated to add the calcium salt of glycerophosphate of '798 to the invention of '493 since '798 teaches it is non-irritating to the skin. One of ordinary skill in the art would have a reasonable expectation of success since '798 teaches that the composition comprising lactic acid and calcium glycerophosphate can be formulated into a facial mask, such as a gel which is taught by '493. Thus it would be obvious to advantageously add lactic acid and calcium glycerophosphate of '798 to the facial mask composition of '493 which includes calcium salts generically.

### ***Correspondence***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bethany Barham whose telephone number is (571)-272-6175. The examiner can normally be reached on Monday to Friday; 8:30 a.m. to 5:00 p.m. EST.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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